PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference DOW-31668-A	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/US 03/25395	International filing date *(day/month/year)* 14.08.2003	Priority date *(day/month/year)* 16.09.2002
International Patent Classification (IPC) or both national classification and IPC B32B27/08		
Applicant DOW GLOBAL TECHNOLOGIES INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the opinion
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the International application
   - VIII ☐ Certain observations on the International application

Date of submission of the demand	Date of completion of this report
24.03.2004	22.11.2004
Name and mailing address of the international preliminary examining authority: European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Girard, S Telephone No. +31 70 340-4187

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US 03/25395

I. Basis of the report

1. With regard to the **elements** of the international application *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*:

Description, Pages

1-13 as originally filed

Claims, Numbers

1-48 as originally filed

Drawings, Sheets

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).

   ☐ the language of publication of the international application (under Rule 48.3(b)).

   ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   ☐ contained in the international application in written form.

   ☐ filed together with the international application in computer readable form.

   ☐ furnished subsequently to this Authority in written form.

   ☐ furnished subsequently to this Authority in computer readable form.

   ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

   ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

   ☐ the description, pages:

   ☐ the claims, Nos.:

   ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

   (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	-
	No:	Claims	1-48
Inventive step (IS)	Yes:	Claims	-
	No:	Claims	1-48
Industrial applicability (IA)	Yes:	Claims	1-48
	No:	Claims	-

2. Citations and explanations

   see separate sheet

Reference is made to the following documents:

(D1): US-A-2001/046606
(D2): US-A-2002/127421
(D3): EP-A-388177
(D4): WO-A-0110643
(D5): EP-A-333508
(D6): US-A-6187397
(D7): JP-A-2001001468 (based on the Derwent abstract)
(D8): WO-A-9852749
(D9): CA-A972511 (based on the Derwent abstract)

1. Re Item V

Re Item V
Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1.1. Independent claims 1,16,30,38:

1.1.1: The attention of the Applicant is drawn to the fact that the application as filed presents severe deficiencies with regard to the requirements of Art.6 PCT, which shall be detailed in point **2.1** hereunder. However, in view of the Applicant's interests, examination with regard to novelty and inventive step has nevertheless been carried out on the present set of claims.

1.1.2: (D1) discloses a coextruded, blown film comprising one core layer of a propylene homopolymer or copolymer, sandwiched between two skin layers made of a blend of linear low density polyethylene and low density polyethylene, whereas the film exhibits a haze of less than about 15% and a 2% secant modulus greater than about 50000 psi. The use of such film as liners or bags, as well as a method of making are as well therein disclosed (**claims 1,18-21; page 1, paragraphs 9-11; page 2, paragraph 18; page 2, paragraphs 24-25; page 6, paragraph 53; page 6, paragraph 61-page 7, paragraph 68; page 8, paragraphs 72-77; examples A,B,C; tables 1-3**).

The mere fact that (D1) does not explicitly mention the cross directional shrinkage values for the film, does not mean that the product disclosed in (D1) does not fulfill this requirement. Thus, unless the Applicant can provide convincing arguments (in the form of comparative examples) showing that the product of (D1) does not exhibit the desired cross directional shrinkage interval, the subject-matter of claims 1 and 16 cannot be considered as novel in the sense of Art.33(2) PCT. The same reasoning applies to the subject-matter of process claims 30 and 38.

1.1.3: (D2) discloses a coextruded, blown film comprising one core layer made from a blend of linear low density polyethylene and low density polyethylene, sandwiched between two skin layers made of linear low density polyethylene, whereas the film exhibits a haze of less than about 15% and a 1% secant modulus greater than about 27500 psi. The use of such film in the packaging field, as well as a method of making are as well therein disclosed (**claims 1,3,4; page 1, paragraphs 5,16 and 17; page 2, paragraphs 28-33; page 3, paragraphs 38-42; page 4, paragraphs 66-71; examples 1,2; tables 1,2**).

The mere fact that (D2) does not explicitly mention the cross directional shrinkage values for the film, or uses a different secant modulus to assess the mechanical properties, does not mean that the product disclosed in (D2) does not fulfill these requirements. Thus, unless the Applicant can provide convincing arguments (in the form of comparative examples) showing that the product of (D2) does not exhibit the desired cross directional shrinkage and 2% secant modulus ranges, the subject-matter of claims 1 and 16 cannot be considered as novel in the sense of Art.33(2) PCT. The same reasoning applies to the subject-matter of process claims 30 and 38.

1.1.4: (D3) discloses a coextruded, blown film comprising one core layer made from an ethylene vinyl acetate copolymer, a very low density polyethylene copolymer or an ethylene butyl acrylate copolymer, sandwiched between two skin layers made of linear low density polyethylene or blends thereof, whereas the film exhibits a cross directional shrinkage (or free shrink, measured according to the same standard ASTM-D-2732) of at least about 20% at 205°F. The use of such film in the packaging field, as well as a method of making are as well therein disclosed (**claims 1,4,5,8,9; page 2, col.1, lines 1-5; page 5, col.7, line 43-col.8, line 54; page 6, col.9, lines 2-8; example 1**).

The mere fact that (D3) does not explicitly mention the haze values or the 2% secant modulus, does not mean that the product disclosed in (D3) does not fulfill these requirements. Thus, unless the Applicant can provide convincing arguments (in the

form of comparative examples) showing that the product of (D3) does not exhibit the desired haze and 2% secant modulus ranges, the subject-matter of claims 1 and 16cannot be considered as novel in the sense of Art.33(2) PCT. The same reasoning applies to the subject-matter of process claims 30 and 38.

1.1.5: (D4) discloses a coextruded, blown film comprising one core layer made from an ethylene/alpha olefin copolymer, sandwiched between two polymeric skin layer, possibly made of an ethylene vinyl acetate copolymer or a polypropylene resin, whereby the film exhibits a haze of less than 5% as measured by using ASTM-D-1003, and a cross directional shrink (or free shrink, measured using the same standard ASTM-D-2732) of at least about 8% at 200°F. The use of such film in the packaging field, as well as a method of making are as well therein disclosed (**claims 1,5,6,8,12-14; page 7, line 29-page 9, line 15; tables 2-5; page 19, lines 6-19; page 21, lines 12-33**).

The mere fact that (D4) does not explicitly mention the 2% secant modulus, does not mean that the product disclosed in (D4) does not fulfill this requirement. Thus, unless the Applicant can provide convincing arguments (in the form of comparative examples) showing that the product of (D4) does not exhibit the 2% secant modulus range, the subject-matter of claims 1 and 16 cannot be considered as novel in the sense of Art.33(2) PCT. The same reasoning applies to the subject-matter of process claims 30 and 38.

1.1.6: The attention of the Applicant is drawn to the fact that documents (D5) to (D8) are equally relevant for assessing the novelty of the present set of claims.

1.2. Dependent claims 2-15,17-29, 31-37, 39-48

1.2.1: Dependent claims 2-15,17-29, 31-37, 39-48 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step.

2. Further comments

2.1: The Applicant's attention is drawn to the fact that many claims of the application, and especially independent claims 1 and 30 , seriously contravene with the requirements of disclosure, support and clarity of Art.5 and 6 PCT. In particular, the matter for which protection is sought is not clearly defined in claim 1: the wording used

constitutes a mere attempt to define the subject-matter in terms of the result to be achieved (haze, secant modulus, cross directional shrinkage) which merely amounts to a statement of the underlying problem. Furthermore, the description on page 2, lines 11 and 32, explicitly stipulates that these results are obtainable when the inner and skin layers have a certain composition, as described in claim 2. Disclosure and support cannot be found for any other type of composition. Thus, the skilled person is not provided with enough information in order to carry out the invention as disclosed in claim 1, and essential technical features are clearly missing in claim 1. Many dependent claims are as well defined only via results to be achieved, which contravenes Art.5 and 6 PCT.

2.2: Claims 16 and 38 comprise respectively all the features of claims 1 and 30, and are therefore not appropriately formulated as claims dependent respectively on claims 1 and 30 (Rule 6.4 PCT).

2.3: The expression "herein incorporated by reference" and similar expression, used on page 8, lines 5-6, should be deleted; Rule 9.1(iv) PCT.

2.4: The statement which refers to the extent of the protection being extended to cover claims interpreted "in accordance with the doctrine of equivalents", on page 13, lines 4-5, should be deleted, since general statements in the description which imply that the extent of protection may be expanded in some vague and not precisely defined way should be objected to (PCT Preliminary Examination Guidelines C-III.4.3a).

2.5: The units of measure used to describe the method of making (especially the apparatuses used therefore) in the description are not additionally expressed in terms of the units stipulated by Rule 10.1/(a)/and/(b) PCT.

2.6: Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents (D1) to (D5), and (D7) to (D9) is not mentioned in the description, nor are these documents identified therein.